Work Order ID 66173 — Page 1

Monday, February 07, 2011 11:36:34 AM

Item ID: D4154-1 — Accept — Setup Start — Stop

Revision ID:

Item Name: Plate

Start Date: 2/8/2011 — Start Qty: 6.00 — Cust Item ID:

Required Date: 2/22/2011 — Req'd Qty: 6.00 — Customer:

Reference:

Run Start — Stop

Approvals: Process Plan: MF — Date: 1-02-07 — Tooling: _____ — Date: _____

QC: _____ — Date: _____ — SPC (Y/N): _____ — Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr: D4154 — Revision Nbr: A									
100		0.00							
Waterjet	**Memo**	0.00				HB 11-4-6			
FLOW CNC Waterjet	1-Cut as per Dwg Dwg Rev:_____ Prog Rev:_____								
304 .080	2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC	**Memo**	0.00				HB 11-4-6			
Quality Control									

Work Rush ASAP - Now

PRELIMINARY ISSUE

Prelim

(6)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 66173

Monday, February 07, 2011 11:36:34 AM

Item ID: D4154-1 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Plate

Start Date: 2/8/2011 **Start Qty:** 6.00 **Cust Item ID:**

Required Date: 2/22/2011 **Req'd Qty:** 6.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00	-inspecto to PBJ Dm only 8/10/07						
QC	**Memo**	0.00							
Quality Control									
130	Form as per dwg	0.00	SB 11/04/07						
Brake NC	**Memo**	0.00							
Brake NC									
140	QC5- Inspect part completeness to step on W/O	0.00	-inspecto to PBJ Dm only 8/10/07						
QC	**Memo**	0.00							
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 66173

Monday, February 07, 2011 11:36:34 AM

Item ID: D4154-1 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Plate

Start Date: 2/8/2011 **Start Qty:** 6.00 **Cust Item ID:**

Required Date: 2/22/2011 **Req'd Qty:** 6.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Identify as per dwg & Stock Location: W/A 030	0.00							
Packaging	**Memo**	0.00				EL	11-4-7		x6
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00					11/4/13		
QC	**Memo**	0.00							
Quality Control									

11-04-7 (6)

POSITIVE RECALL
DATE 11.04.13
EFFECTIVE
AUTH
RELEASED
Per Revised Rev B

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Picklist Print

Monday, February 07, 2011 11:36:31 AM

Work Order ID: 66173

Parent Item: D4154-1

Parent Item Name: Plate

Start Date: 2/8/2011 **Required Date:** 2/22/2011

Start Qty: 6.00 **Required Qty:** 6.00

Comments: IPP Rev:A 10.08.03 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S18GA		Purchased	No			100	sf	124.5200	4.2697	26.96653			
304/316 .050 Sheet										HB 11-4-6			

Location	Loc Qty	Loc Code
MAT	94	
116135	30	
116604	64	
MAT20	30.52	
111743	4.75	
112178	5	
113062	20.77	

116604

(6)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	6673
Description: PLATE	Part Number:	D4154-1
Inspection Dwg: D4154-1 , Rev: PRELIM B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [X] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.400	+/- .010	.401	A		V 1B07	
1.19	+/- .030	1.19	B		V	
.175	+/- .010	.131	C		V	
.188	+/- .030	.88	D		V	
⌀ .188	+.005 -.001	.190	E		V	
⌀ .516	+.008 -.001	.518	F		V	
2.75	+/- .030	2.75	G		V	
15.80	+/- .030	15.80	H		T 1B01	
3.95	+/- .030	3.946	I		V	
4.00	+/- .030	3.998	J		V	
21.75	+/- .030	21.75	K		T	
4.35	+/- .030	4.340	L		V	
21.31	+/- .030	21.31	M		T	
4.26	+/- .030	4.262	N		V	
8.83	+/- .030	8.834	O		PPOW3D	
4.41	+/- .030	4.409	P		V	
5.16	+/- .030	5.159	Q		V	
.55	+/- .030	.550	R		V	
91.56	+/- .030	91.56	S		T	
6.72	+/- .030	6.723	T		V	
6.42	+/- .030	6.419	U		V	
1.80	+/- .030	1.809	V		V	

Measured by:	JB	Audited by:		Prototype Approval:	
Date:	11-4-6	Date:	11/6/07	Date:	

& PBI Dwg only

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

DART AEROSPACE LTD	Work Order:	66173
Description: PLATE	Part Number:	D4154-1
Inspection Dwg: D4154-1 Rev: PRELim B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [X] Prototype

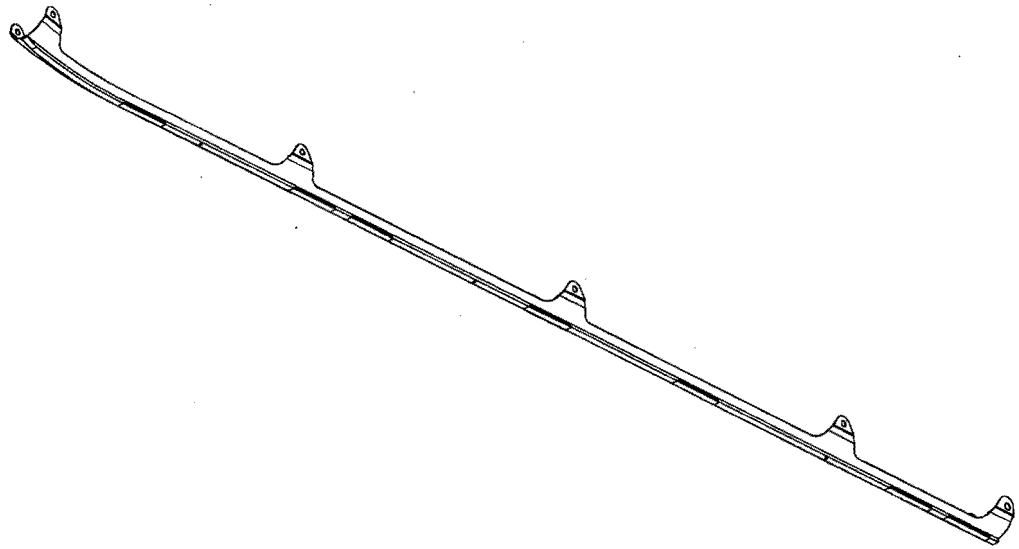
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
16.00	+/- .030	16.00	✓		T HBO2	
41.31	+/- .030	41.31	✓		T	
49.14	+/- .030	49.14	✓		T	
67.06	+/- .030	67.06	✓		T	
75.00	+/- .030	75.00	✓		T	
90.96	+/- .030	90.96	✓		T	
.050	+/- .010	.046	✓		V HBO2	

Measured by:	HB	Audited by:		Prototype Approval:	
Date:	11-4-6	Date:	11/04/07	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue to PDI Dq only	KJ/JLM	

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4154-041	WEARPLATE ASSEMBLY
1	1	D4154-1	PLATE
2	1	D4155-1	BAR
3	A/R	2059B	HARDCOAT
4	A/R	4714	PLUS ONE ROCKGUARD (SEE NOTE 11, SHT 2)

PB1



D4154-041 WEARPLATE ASSEMBLY

PRELIMINARY ISSUE

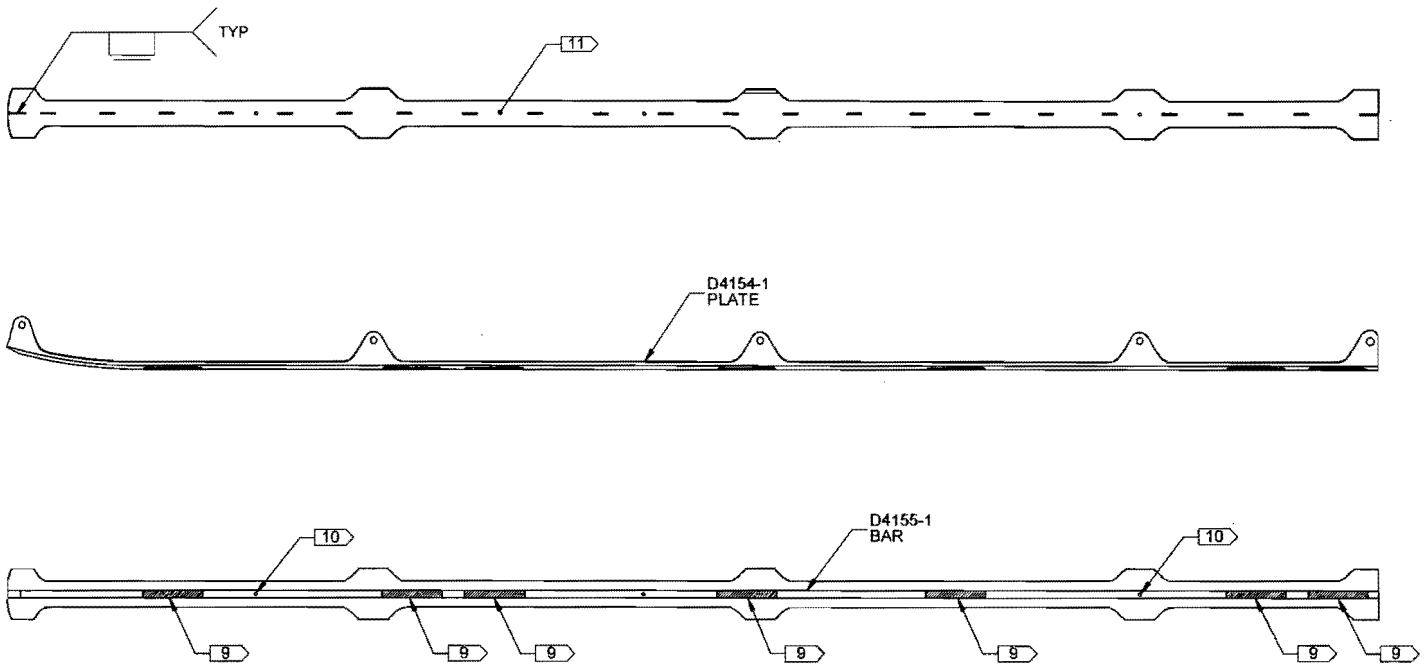
11.04.05

w/o 66673

REV.	DESCRIPTION	BY	DATE
PB1	ITEM 4 WAS PR1422 (D3-1); REMOVED FINISH TO NOTE 2 (A8-2); REMOVED SECTION A-A (NO LONGER REQUIRED); REVISED D4154-1F	MB	11.04.05
A	NEW ISSUE	SC	10.07.22

DESIGN	SC	DART AEROSPACE USA, INC. PORT HADLOCK, WA
DRAWN		
CHECKED		DRAWING NO. D4154 REV. PB1
MFG. APPR.		SHEET 1 OF 3
APPROVED		TITLE WEARPLATE ASSEMBLY SCALE NTS
DE APPR.		
DATE	11.04.05	

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



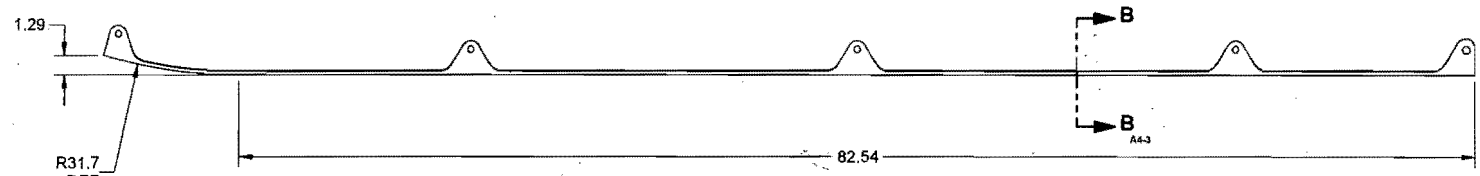
D4154-041 WEARPLATE ASSEMBLY

PRELIMINARY ISSUE
11.04.05

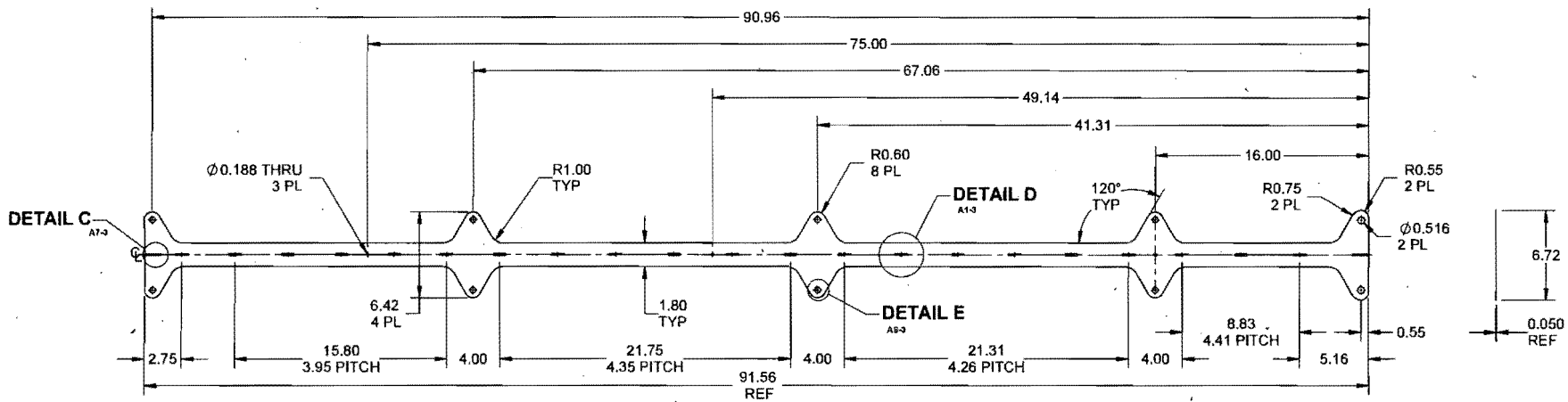
NOTES:
1) MATERIAL: N/A
2) FINISH: NONE PB1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH P/N "D4154-041" PER QSI 044 6.1 (FINE POINT PERMANENT INK MARKER)
7) WEIGHT: 5.99 lbs
8) WELDING: PER QSI 004
9) 2059B HARDCOAT WELD, 0.13 THICK X 0.50 WIDE, FLUSH WITH D4154-1 BAR ON ALL 3 SURFACES AT 7 PLACES
10) TRANSFER DRILL ⌀0.188 HOLES FROM D4154-1 PLATE TO D4155-1 BAR
11) COAT ENTIRE TOP (CONCAVE) SURFACE WITH A LAYER OF SIKAFLEX-241/-291 OR PROSEAL 890 OR PROSEAL 1422 OR MIL-S-8802 CLASS B SEALANT, OR PLUS ONE ROCKGUARD 4714, 0.020-0.040 THICK. PB1

DESIGN	SC	**DART AEROSPACE USA, INC.** PORT HADLOCK, WA
DRAWN		
CHECKED		DRAWING NO. D4154 REV. PB1
MFG. APPR.		SHEET 2 OF 3
APPROVED		TITLE WEARPLATE ASSEMBLY SCALE NTS
DE APPR.		
DATE 11.04.05		

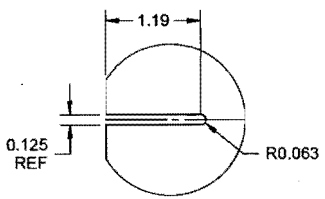
COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



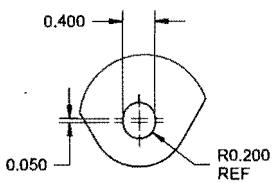
D4154-1 PLATE
(MAKE FROM D4154-1F)



PB1 **D4154-1F FLAT PATTERN**

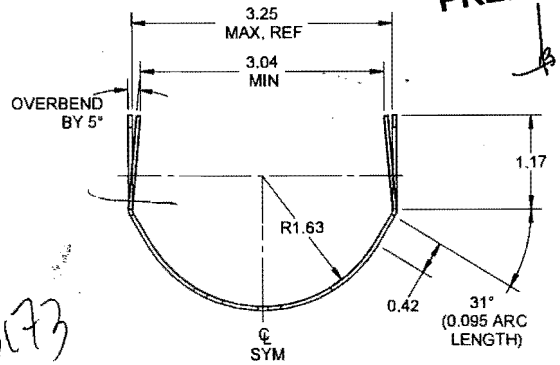


DETAIL C A7-3
END SLOT DETAIL, 2 PL

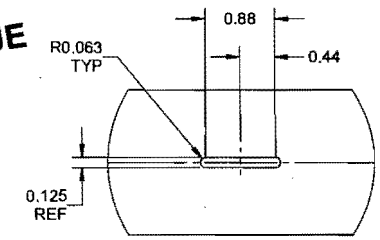


DETAIL E C4-3
SLOT DETAIL TYP

PRELIMINARY ISSUE
B 11.04.05



SECTION B-B D3-3



DETAIL D C4-3
SLOT DETAIL TYP

NOTES:
1) MATERIAL : AISI 304/316 STAINLESS STEEL PER AMS 5513 OR 5524
OR ASTM A240 OR ASME SA240
18 GAUGE 0.050 THICK, (REF. DART SPEC. M304S18GA)
2) FINISH : NONE
3) TOLERANCES : PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS : INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES : 0.005 TO 0.010 MAX
6) IDENTIFICATION : NONE
7) WEIGHT : 2.71 lbs

010173

DESIGN	SC	**DART AEROSPACE USA, INC.** PORT HADLOCK, WA
DRAWN		DRAWING NO. D4154 REV. PB1 SHEET 3 OF 3
CHECKED		TITLE WEARPLATE ASSEMBLY SCALE NTS
MFG. APPR.		
APPROVED		
DE APPR.		
DATE	11.04.05	

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

Kim Johnston

From: David Shepherd <dshepherd@dartaero.com>
Sent: Monday, April 11, 2011 9:36 AM
To: 'Linda Lacelle'; 'Marc Bellavance'
Cc: 'Kim Johnston'
Subject: RE: D4154-041

Linda,

I plan to sign the dwg off Monday, but I am OK with the parts.
Please go ahead and ship.

REFERENCE ONLY

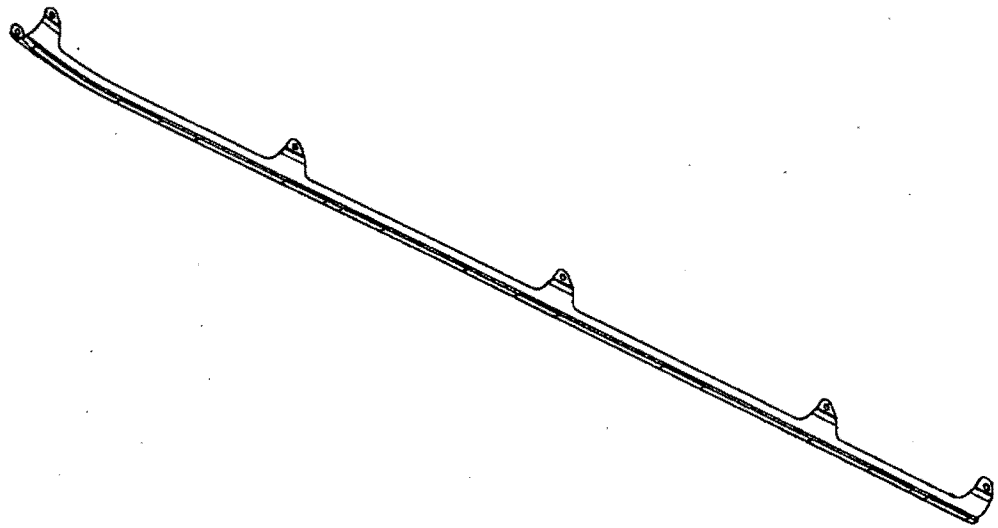
Regards,
David

From: Linda Lacelle [mailto:llacelle@dartaero.com]
Sent: Friday, April 08, 2011 9:30 AM
To: dshepherd@dartaero.com; Marc Bellavance
Cc: Kim Johnston
Subject: D4154-041
Importance: High

I am shipping these today to ERA, they are still under positive recall...is it still ok to ship???

Thank You,
Linda Lacelle
Production Manager
Dart Aerospace Ltd
Hawkesbury, ON
Phone: 613 632 9577
Fax: 613 632 1053
Cell: 613 676 1655

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4154-041	WEARPLATE ASSEMBLY
1	1	D4154-1	PLATE
2	1	D4155-1	BAR
3	A/R	2059B	HARDCOAT
B 4	A/R	4714	PLUS ONE ROCKGUARD (SEE NOTE 11, SHT 2)



D4154-041 WEARPLATE ASSEMBLY

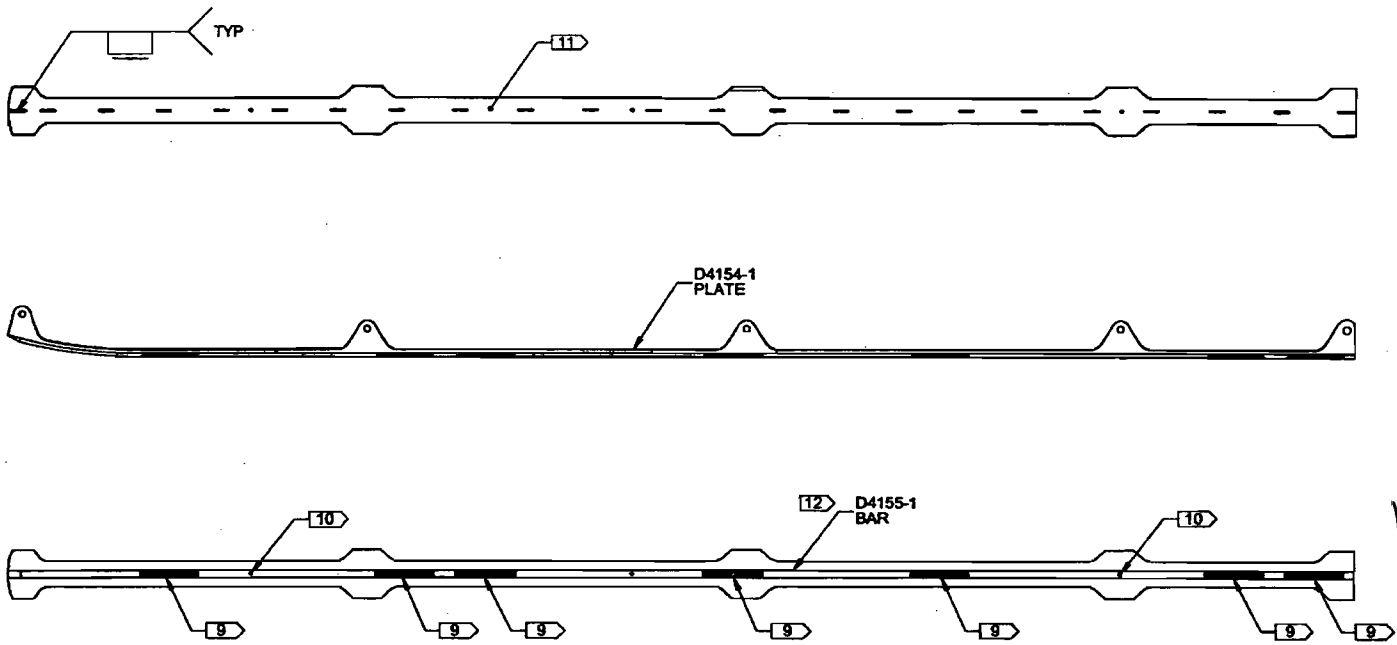
66173

RELEASED
2011 -04- 13

REV.	DESCRIPTION	BY	DATE
B	ITEM 4 WAS PR1422 (D3-1); REMOVED FINISH TO NOTE 2 (A8-2); REMOVED SECTION A-A (NO LONGER REQUIRED); REVISED D4154-1F	MB	11.04.05
A	NEW ISSUE	SC	10.07.22

DESIGN	SC	DART AEROSPACE USA, INC. PORT HADLOCK, WA
DRAWN		
CHECKED		DRAWING NO. D4154 REV. B SHEET 1 OF 3
MFG. APPR.		
APPROVED		TITLE WEARPLATE ASSEMBLY SCALE NTS
DE APPR.		
DATE	11.04.05	

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE MADED FROM OR COPIED OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



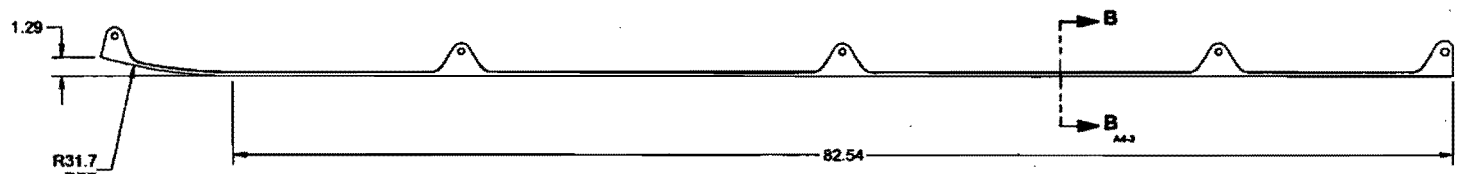
D4154-041 WEARPLATE ASSEMBLY

RELEASED
2011-04-13

NOTES:
1) MATERIAL: N/A
2) FINISH: NONE (B)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH P/N "D4154-041" PER QSI 044 6.1 (FINE POINT PERMANENT INK MARKER)
7) WEIGHT: 6.88 lbs
8) WELDING: PER QSI 004
9) 2059B HARDCOAT WELD, 0.19 THICK X 0.50 WIDE, FLUSH WITH D4154-1 BAR ON ALL 3 SURFACES AT 7 PLACES
10) TRANSFER DRILL ⌀0.188 HOLES FROM D4154-1 PLATE TO D4155-1 BAR
11) COAT ENTIRE TOP (CONCAVE) SURFACE WITH A LAYER OF PLUS ONE ROCKGUARD 4714, 0.020-0.040 THICK (B)
12) FORM TO MATCH PROFILE OF D4154-1 AT TIME OF WELDING

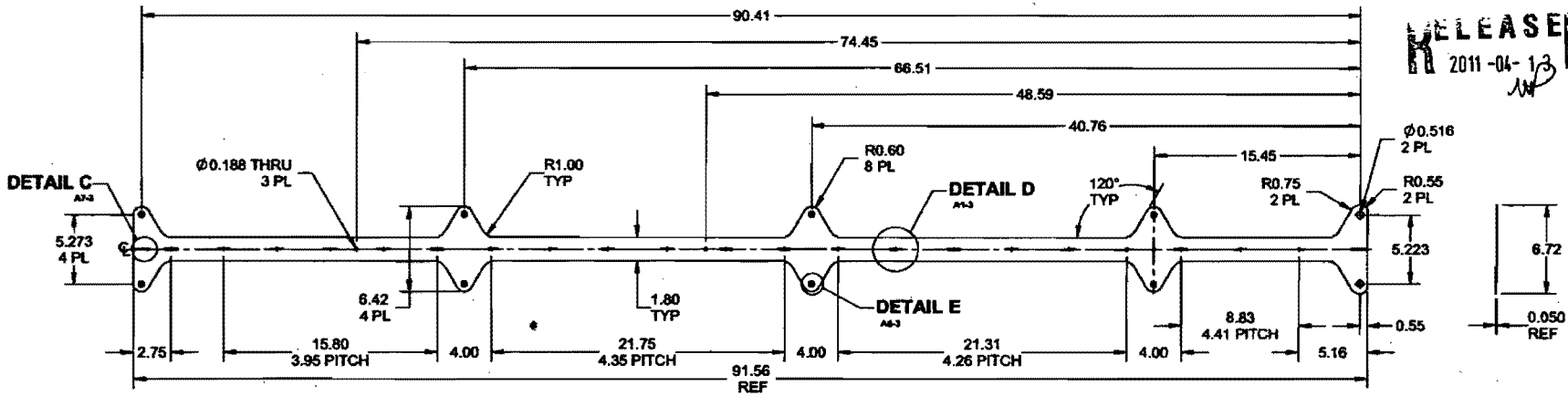
DESIGN	SC	DART AEROSPACE USA, INC. PORT HADLOCK, WA
DRAWN		
CHECKED		DRAWING NO. D4154 REV. B
MFG. APPR.		SHEET 2 OF 3
APPROVED		TITLE WEARPLATE ASSEMBLY SCALE NTS
DE APPR.		
DATE	11.04.05	

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

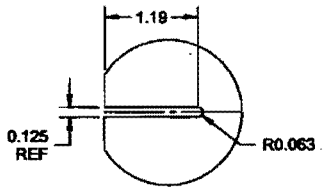


D4154-1 PLATE
(MAKE FROM D4154-1F)

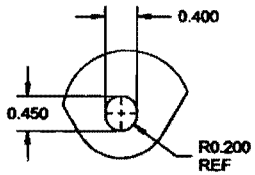
RELEASED
2011-04-13



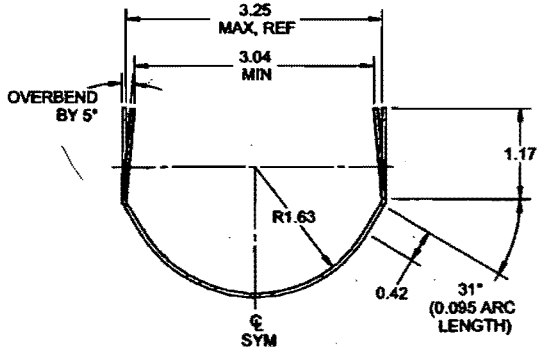
D4154-1F FLAT PATTERN



DETAIL C
END SLOT DETAIL, 2 PL C7-3

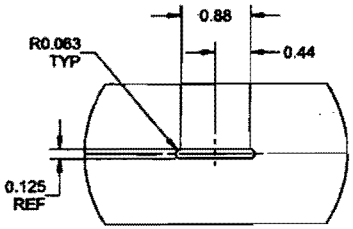


DETAIL E
SLOT DETAIL TYP C4-3



SECTION B-B D3-3

66173



DETAIL D
SLOT DETAIL TYP C4-3

NOTES:
1) MATERIAL : AISI 304/316 STAINLESS STEEL PER AMS 5513 OR 5524
OR ASTM A240 OR ASME SA240
18 GAUGE 0.050 THICK, (REF. DART SPEC. M304S18GA)
2) FINISH : NONE
3) TOLERANCES : PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS : INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES : 0.005 TO 0.010 MAX
6) IDENTIFICATION : NONE
7) WEIGHT : 2.95 lbs

DESIGN	SC	DART AEROSPACE USA, INC. PORT HADLOCK, WA
DRAWN		DRAWING NO. D4154 REV. B SHEET 3 OF 3
CHECKED		TITLE WEARPLATE ASSEMBLY SCALE NTS
MFG. APPR.		
APPROVED		
DE APPR.		
DATE	11.04.05	

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISCLOSED TO ANY OTHER PERSON WITHOUT THE AUTHORISATION FROM DART AEROSPACE USA, INC.